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 1                   IN THE UNITED STATES DISTRICT COURT
                     FOR THE EASTERN DISTRICT OF TEXAS
 2                              TYLER DIVISION


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     SMARTFLASH LLC and              )
 4   SMARTFLASH TECHNOLOGIES              DOCKET NO. 6:13cv447
     LIMITED
 5
         -vs-                        )
 6
                                         Tyler, Texas
 7                                   )   8:45 a.m.
     APPLE INC.                          February 17, 2015
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                            TRANSCRIPT OF TRIAL
10                            MORNING SESSION
                   BEFORE THE HONORABLE RODNEY GILSTRAP,
11                     UNITED STATES DISTRICT JUDGE

12

13                       A P P E A R A N C E S

14

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      produced by a Computer.
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 1                   P R O C E E D I N G S

 2              (Jury out.)

 3              COURT SECURITY OFFICER:  All rise.

 4              THE COURT:  Be seated, please.

 5              All right.  Are the parties ready to read into the

 6   record those items from the list of pre-admitted exhibits

 7   that were used during yesterday's portion of the trial?

 8              MR. CASSADY:  Yes, Your Honor.

 9              THE COURT:  All right.  Plaintiff, if you'll go to

10   the podium and offer your rendition first.

11              MR. CASSADY:  May it please the Court.

12              THE COURT:  Proceed.

13              MR. CASSADY:  PX No. 1, PX 9, PX 11, PX 14, PX 108,

14   PX 114, PX 127, PX 141.002, PX 162, PX 194, and PX 198, Your

15   Honor.

16              THE COURT:  All right.  Are there objections from

17   the Defendant as to that rendition?

18              MR. POST:  No objections, Your Honor.

19              THE COURT:  All right.  Are you prepared to offer

20   the Defendant's list?

21              MR. POST:  Yes, Your Honor.

22              THE COURT:  Please proceed.

23              MR. POST:  PX 154, DX 154, DX 189, DX 175, DX 140,

24   DX 139, DX 198, DX 225, DX 200, PX 127, DX 146, DX 324, DX

25   249, and DX 322.
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 1   THE COURT: All right. Are there objections to

 2   that rendition, from the Plaintiff?

 3   MR. CASSADY: No objections, Your Honor.

 4   THE COURT: All right. Counsel, just as a matter

 5   of housekeeping, I am told that the clock in the back of the

 6   courtroom has been replaced, and the one that was there

 7   yesterday that ran 25 minutes slow all day long has been

 8   replaced by one that keeps good time. So don't hesitate to

 9   look at the clock if you want to.

10   All right. Let's bring in the jury, please.

11   COURT SECURITY OFFICER: All rise for the jury.

12   THE COURT: And the witness can return to the

13   witness stand, Mr. Racz. I remind you, you remain under

14   oath.

15   Mr. Batchelder, you may go to the podium.

16   Oh, I'm sorry, you passed.

17   Redirect, Mr. Caldwell. In other words, get ready

18   now, and we won't waste time later.

19   MR. CASSADY: Your Honor, we don't have --

20   MR. CALDWELL: We have no further questions of Mr.

21   Racz. I can tell them when the jury is in, if you --

22   THE COURT: All right. I'll call for it. That's

23   not what you told me at the end of the day yesterday.

24   MR. CALDWELL: I thought I did when we got through

25   the transcripts, sir.

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 1                    (Jury in.)

 2             THE COURT:  Please be seated.

 3             Welcome back, Ladies and Gentlemen of the Jury.

 4             When we recessed yesterday, the Defendant had

 5  passed the witness, having cross-examined the witness.

 6             Does the Plaintiff have additional redirect?

 7             MR. CALDWELL:  Your Honor, we don't.  We pass the

 8  witness.  No further questions.

 9             THE COURT:  Then you may step down, Mr. Racz.

10             Plaintiff, call your next witness.

11             MR. CURRY:  Your Honor, before we call our next

12  witness, may I read a stipulation to the jury?

13             THE COURT:  Proceed.

14             MR. CURRY:  Smartflash LLC and Smartflash

15  Technologies Limited and Apple Inc., hereby submit the

16  following joint stipulation:  Apple has not identified any

17  design-around/non-infringing alternatives and opinions of

18  counsel.

19             Your Honor, may we proceed in calling our next

20  witness?

21             THE COURT:  Proceed.

22             MR. CURRY:  Plaintiffs call Mark Thomas Jones.

23             THE COURT:  All right.  If you'll come forward.

24             MR. CURRY:  And, Your Honor, while Mr. Jones -- Dr.

25  Jones is getting sworn in, may I have permission to set up
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1   my --

2   THE COURT: Yes.

3   MR. CURRY: Thank you.

4   (Witness sworn.)

5   THE COURT: Please have a seat on the witness

6   stand.

7   All right.   Counsel, are you ready to proceed?

8   MR. CURRY: Almost.

9   THE COURT: It's your time.

10   And let me just ask this, given the number of

11   counsel in the case: The first time you appear at the podium

12   with a witness, please identify yourself for the jury in the

13   record.

14   MR. CURRY: My name is Austin Curry, counsel for

15   Plaintiff.

16   THE COURT: All right.   Mr. Curry, you may proceed.

17   DR. MARK JONES, PLAINTIFFS' WITNESS, SWORN

18   DIRECT EXAMINATION

19   BY MR. CURRY:

20   Q.   Good morning, sir.

21   A.   Good morning.

22   Q.   Please identify yourself to the jury.

23   A.   My name is Mark Jones.

24   Q.   Are you a Dr. Jones?

25   A.   Yes, I am.   I have a Ph.D. in computer science.

1   Q.   And what do you do for a living, Dr. Jones?

2   A.   I'm a professor at Virginia Tech.

3   Q.   Are you a Smartflash employee?

4   A.   No, I'm not.

5   Q.   Why are you here at this trial?

6   A.   I'm here to give my opinions based on my analysis with

7   respect to infringement in this case.

8   Q.   Are you what's called an expert witness?

9   A.   Yes, I am.

10   Q.   How is that different from a fact witness?

11   A.   A fact witness testifies about their knowledge of events

12   as they happened and the things they have -- of which they

13   have personal knowledge. My job as an expert witness is to

14   analyze materials in the case that are made available to me

15   and then to form opinions based on that analysis and

16   investigation.

17   Q.   Were you compensated for the time spent in this case?

18   A.   Yes, I was. I was compensated for my time at my usual

19   rate of $450 an hour.

20   Q.   Does your compensation have anything to do with the

21   outcome of this trial?

22   A.   No.

23   Q.   What are you going to talk to us about today?

24   A.   I'm going to talk to you about the invest --

25   investigation I performed on Apple's products, as well as my

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 1   analysis of those products with respect to the claims that

 2   are at issue in this case.

 3   Q.    Might we hear from you later on in this trial?

 4   A.    Yes, at the end of the case.

 5   Q.    How old a man are you?

 6   A.    I'm 49 years old.

 7   Q.    Where do you live?

 8   A.    I live in Blacksburg, Virginia.

 9   Q.    What's in Blacksburg, Virginia?

10   A.    Pretty much Virginia Tech, and that's about it.

11   Q.    Do you have kids?

12   A.    I do.  I have four kids.

13   Q.    What are their ages?

14   A.    They are 23, 21, 13, and 13.

15   Q.    Are the 13-year-olds twins?

16   A.    No, they're -- they're both adopted.

17   Q.    Where were you born?

18   A.    I was born in Newport News, Virginia.

19   Q.    What was your family doing in Newport News, Virginia?

20   A.    My father was in the Army and was stationed at NASA

21   Langley and Fort Eustis.

22   Q.    Where did you grow up?

23   A.    I grew up in Dallas during the 1970s.

24   Q.    What brought your family from Virginia to Texas?

25   A.    My father was an engineering professor at SMU.
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1   Q.   And then did your family leave Texas?

2   A.   Yes. He got an offer at Virginia Tech, and it was a

3   good opportunity for -- for the family so we moved to

4   Blacksburg, Virginia.

5   Q.   Was there a point in time at which you and your father

6   overlapped and were both engineering professors at Virginia

7   Tech?

8   A.   Yes, for about three years before he retired.

9   Q.   What made you want to be a teacher?

10 A.   Well, first of all, my dad, as -- as long as I could

11 remember was -- was a teacher. And as we got a little bit

12 older, my mom became a teacher helping out kids who couldn't

13 read.

14 Q.   Before you got to be a professor at Virginia Tech, what

15 schooling did you have?

16 A.   Well, first, I went to Clemson University to study

17 computer science where I got my Bachelor's of science degree.

18 Q.   What's computer science?

19 A.   At a high level, it's a study of how to program

20 computers, how to design computers to solve problems.

21 Q.   Did you work while you were in school?

22 A.   Yes, I did. I had held a few jobs as an undergraduate,

23 one of which was working in a -- a laboratory that was funded

24 by the Air Force.

25 Q.   And what did you do after you got your degree in

1   computer science?

2   A.   Well, I went on to study computer science to get my

3   Ph.D. at Duke University.

4   Q.   In graduate school, did you continue working?

5   A.   Yes, I did. In the summers, I worked at NASA Langley

6   Research Center.

7   Q.   And what did do you while you were at NASA?

8   A.   There, I -- I applied the algorithms and -- and methods

9   that I'd developed at Duke to analyzing complex structures,

10 including the -- the solid rocket boosters that we were

11 analyzing for the Challenger crash.

12 Q.   Did you actually earn a Ph.D.?

13 A.   Yes, I did. I got my Ph.D. from Duke in 1990.

14   MR. CURRY: Mr. Mortensen, can we pull up the

15 slides, please?

16 Q.   (By Mr. Curry) What are we seeing on the screen here?

17 A.   That's a -- my building at Virginia Tech where I have my

18 office and my research labs, and it's where I've taught

19 several classes there, as well. That's Torgersen Hall.

20 Q.   Now, before you became a professor at Virginia Tech, did

21 you have any real-world experience?

22 A.   Yes. After getting my Ph.D., I went to work at Argonne

23 National Laboratory just south of Chicago.

24 Q.   And then when did you first become a professor of

25 engineering?

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 1   A.    In -- well, in 1993, I went to University of Tennessee

 2   to join the computer science faculty there.  And then in

 3   1997, I got the opportunity to go -- back home to Virginia

 4   Tech, and -- and I took that.

 5   Q.    What are your responsibilities as a professor at

 6   Virginia Tech?

 7   A.    First, it's teaching.  I teach undergraduates and

 8   graduate students.  It also involves doing research,

 9   supervising students, designing classes, and supervising

10   aspects of the curriculum.

11   Q.    Have you previously served as an expert in a patent

12   infringement case before?

13   A.    Yes, I have, in several cases.

14   Q.    Are you always on the side that is owning the patent?

15   A.    No.  Sometimes I'm on the patent owner's side, sometimes

16   I'm on the Defendant's side.

17   Q.    Dr. Jones, what makes you qualified to give testimony

18   about infringement in this case?

19   A.    First, the background that I have, my education.  My

20   experience totals over 30 years in computing, as well as the

21   analysis and research in this case that I've done in order to

22   form the basis for my opinions.

23   Q.    Are you a lawyer?

24   A.    No, I'm not.

25   Q.    How is it then that you can understand patents?
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1 A.   Patents are really not written for lawyers. They're

2 written for people who are of ordinary skill in the art.

3 Q.   Can you give us some examples of that?

4 A.   Well, if it were a patent on a new chemical compound,

5 that patent would be written for -- for chemists. If it were

6 a patent on a new pharmaceutical, that patent may be written

7 for doctors. In the case of computing, if it's a patent for

8 computing, that patent is written for people who understand

9 computing.

10 Q.   What technical background does someone need to have, in

11 order to understand Smartflash's patents?

12 A.   I put together a slide for that. It's a Bachelor's

13 degree in electrical engineering or its equivalent, or at

14 least five years of experience in manufacturing or

15 engineering with significant exposure to the digital content

16 distribution and/or e-commerce industries.

17 Q.   Thank you.

18   Dr. Jones, will you give us an overview of the things

19 we're going to discuss in your presentation today?

20 A.   Yes. First, we'll start with the products at issue.

21 I'll give a -- a high-level summary of my opinions before we

22 get into them, talk about relevant technology concepts

23 briefly, just a few of them, go over my infringement analysis

24 with several subparts, and then address Apple's arguments.

25 Q.   Which section will take the longest?

 1   A.   Definitely the infringement analysis.

 2   Q.   How long do you think that everything will take to get

 3   through?

 4   A.   Right around two hours.

 5   Q.   Does it need to be that long?

 6   A.   It -- it does because the jury has an important decision

 7   to make, and I need to explain the evidence that underlies my

 8   analysis and explain that in detail.

 9   Q.   Dr. Jones, what is the first section of your

10   presentation today?

11   A.   Products at issue.

12   Q.   And what Apple products are at issue in this case?

13   A.   Apple's mobile devices, and here are -- at a high level,

14   the iPhone, iPad, and iPod Touch.

15   Q.   Are there any differences between the iPhone, the iPad,

16   and the iPod Touch that we need to know about?

17   A.   Well, there's several differences, including as you can

18   see, the screen size, processor speeds, different amounts of

19   memory; but with respect to this case, there are no

20   significant differences between the different models in terms

21   of how they infringe the patents.

22   Q.   Now, before we move to the next section, will you please

23   explain what you did to investigate whether Apple infringes

24   in this case?

25   A.   Yes. Well, first, I studied the patents, and in

 1 | particular, the claims in those patents. I studied Apple's

 2 | source code for their products. I did testing on Apple's

 3 | products. I studied both public and confidential Apple

 4 | documents that were made available in the case. I read and

 5 | studied Apple's discovery responses, including answers to

 6 | questions. I read and studied Apple's engineers'

 7 | deposition -- deposition testimony, as well as Apple's own

 8 | experts' reports and testimony.

 9 | Q.   Is Apple's source code publicly available?

10 | A.   No, it's not.

11 | Q.   Are Apple's confidential documents publicly available?

12 | A.   No.

13 | Q.   How is it then that you had access to these materials?

14 | A.   Well, there's an order in the case that allows experts

15 | on both sides to review materials, such as source code and

16 | confidential documents, that the public can't see so that we

17 | can form our opinions.

18 | Q.   What parts of the patents did you review in this case?

19 | A.   Well, all of them, but I studied first -- I went through

20 | the cover sheet on the patents and then walked through each

21 | part of the patents ending in the claims.

22 | Q.   Will you please take us through different sections of

23 | the patent?

24 | A.   Yes.

25 | MR. CURRY: Mr. Mortensen, will you pull up the

1 | '772 patent, please?

2 | Q.   (By Mr. Curry) And, Dr. Jones, is it your understanding

3 | that the '772 patent is behind Tab 4 of the jury's binders?

4 | A.   That's a -- yes.

5 | Q.   What are we seeing here on the first page of the '772

6 | patent?

7 | A.   This is the cover page, a certification of the United

8 | States Patent and Trademark Office.

9 | MR. CURRY: Mr. Mortensen, can we have the next

10 | page of the patent, please?

11 | Q.   (By Mr. Curry) Okay.   What's on the screen here?

12 | A.   Well, this is the first page of the patent, which

13 | describes -- you can see in the upper right-hand corner is

14 | the U.S. patent number, which ends in '772, and that's how

15 | we'll refer to it.

16 | Below that is the date it was issued, December 25th,

17 | 2012.

18 | Over on the left side, you can see at 75 that -- the

19 | inventors, Mr. Racz and Mr. Hulst.

20 | If we go down to the right, we can see the abstract,

21 | which briefly describes the patent, as well as related patent

22 | applications on the left-hand side.

23 | MR. CURRY: Mr. Mortensen, could you scroll down to

24 | the next page, please?

25 | Keep going.   Next page.

1   Q.   (By Mr. Curry) And what are we seeing here in Figure 1A?

2   A.   Well, this is the beginning of the figures and drawings

3   that describe how to build and practice the invention.

4   So we saw Figure 1A yesterday. That's sort of the beginning

5   of those figures, and there are 17 such sheets of figures and

6   drawings.

7   MR. CURRY: Now, Mr. Mortensen, could you please

8   scroll down to the part where the text begins.

9   There we go. Stop right there, please.

10   Q.   (By Mr. Curry) What is this section of the patent, Dr.

11   Jones?

12   A.   This first -- this section is the beginning of the

13   written specification, and the first part in it gives

14   cross-references to related applications. Those are other

15   related patent applications.

16   The other two items of interest are the background of

17   the invention. That's where the inventors give some

18   background in terms of the related material. And then begins

19   with the summary of the invention.

20   And the rest of this written portion just describes in

21   more detail how to build and practice the invention, as well

22   as describing the figures.

23   Q.   Where does the patent show you where the invention is?

24   A.   That starts near the -- near the very end.

25   MR. CURRY: Mr. Mortensen, could we go to Claims 30

1 through 32, please?

2 Q.   (By Mr. Curry) What -- what column is on the screen, Dr.

3 Jones?

4 A.   I'm sorry. I just missed that before it -- it's Column

5 30 -- well, 29 and 30, and then we're going to be looking at

6 Column 30.

7   MR. CURRY: Mr. Mortensen, will you pull up the

8 claims, please?

9 Q.   (By Mr. Curry) And what are we seeing here?

10 A.   This is the -- the first part of Claim 30, and this is

11 known as the preamble. So it's a data access terminal for

12 controlling access to one or more content data items stored

13 on a data carrier, the data access terminal comprising...

14   MR. CURRY: Mr. Mortensen, can you pull up the rest

15 of Claim 30 and grab 32 as well, please?

16 Q.   (By Mr. Curry) What are we seeing on the screen here in

17 Columns 31 and 32, Dr. Jones?

18 A.   This is more -- well, on the left side, that's more of

19 Claim 30. There are additional claims to the right, but

20 Claim 30 would continue on down Column 31 and then eventually

21 come to Claim 32, which is near -- closer to the bottom of

22 Column 31.

23 Q.   Okay. Thank you.

24   Now, Dr. Jones, can you explain how the invention of

25 Claim 32 works?

1   A.   Yes, I could. I could walk you through the claims. It

2   may be easier to walk through on the board.

3   MR. CURRY: Your Honor, may the witness leave the

4   witness stand and approach the board?

5   THE COURT: You want him to approach that chart

6   there?

7   MR. CURRY: Yes, sir. We're going to put Claim 32,

8   an asserted claim, on the chart.

9   THE COURT: All right. I'll grant leave.

10   MR. CURRY: Thank you.

11   THE COURT: He needs to use this handheld

12   microphone while he's there.

13   MR. CURRY: Your Honor, may I inquire if the jury

14   can see the chart okay?

15   THE COURT: Is it close enough, Ladies and

16   Gentlemen? Just shake your heads, and I'll see.

17   Looks like everybody can see it.

18   MS. FUKUDA: Your Honor, is there another copy for

19   this side, or shall we move over?

20   THE COURT: Counsel, you're welcome to go around

21   and stand on that far wall so you can see, as well.

22   MS. FUKUDA: Thank you, Your Honor.

23   Q.   (By Mr. Curry) Dr. Jones, will you walk us through the

24   claim and explain how the invention works?

25   A.   Yes. I think -- why don't I start with just going

 1   through this at a high level, rather than going through each

 2   and every element.

 3   So the -- the first section of the claims is what I

 4   would call at a high level the hardware aspects or hardware

 5   elements.

 6   In the hardware elements, there's a user interface, a

 7   data carrier interface, a processor; and I'll go through each

 8   one of those items in detail later on, but that's at a high

 9   level what's in the hardware elements.

10   Q.   And what's next in the claim, Dr. Jones?

11   A.   Next in the claim, I would say the high level are

12   getting information that's available for purchase. And so

13   that would be essentially these elements, which describe

14   content items that are available. That could be content,

15   could be things like movies or TV shows or music or games.

16   Q.   And what happens next, Dr. Jones, in the claim?

17   A.   Well, let me walk through this one a little bit -- well,

18   let me go through the next elements, and then we'll come back

19   to this one.

20   Next is where a user can select something for purchase,

21   and then the ways in which that purchase is accomplished and

22   delivered to the device. I'll call that, at a high level,

23   purchase and delivery of the selected content.

24   Q.   In going back to the first sequence in the claim. Can

25   you give more elaboration on how the -- that sequence works

1   in the claim?

2   A.   Well, in terms of the content items, you can see that

3   there's code to request identifier data identifying one or

4   more content data items available for retrieving.

5   This is code that's operating on a device. This is this

6   data access terminal that's described by this hardware. And

7   it's going to make a request to a server asking for

8   identifier data for content that's available for purchase.

9   Then the next step would be code to retrieve said

10 identifier data identifying the said one or more content data

11 items available for receiving. This is essentially the code

12 that receives what was requested, right?

13   And this ties back into the previous element. I don't

14 know if you can see that clearly, but draw an arrow from that

15 claim to -- that claim element to the next claim element.

16 Q.   How do you know those two are tied together?

17 A.   Well, the particular word here is -- is "said." That's

18 language used in patents to -- to say I'm going to refer back

19 to something else before. So if it's said identifier data,

20 then I look back up here and I say, here's identifier data.

21 That's what's being referred back to. So what's in this

22 element is what's being referred to here.

23 Q.   And will you please continue explaining the invention?

24 A.   Yes. So this next couple of steps is, again, another

25 request and retrieve pair that's asking for more information

 1 that's pertaining to -- and, again, it's the said one or more

 2 content data items that are available for retrieving, so this

 3 step is asking about information from the previous step.

 4 This step, again, said content information, is asking for

 5 information from this prior code element.

 6 Q.   Will you move on to the next sequence, please, and

 7 explain that?

 8 A.   Yes. So the next sequence is the payment sequence.

 9 Here, it's code to receive a first user selection. What's

10 happening here is the user is making a selection of at least

11 one of the said one or more content data items -- for

12 example, selecting a song. And, again, that's referring back

13 to the data items that were previously referenced in the --

14 the earlier elements.

15 Q.   What happens next in the invention?

16 A.   Next is the -- the code responsive to this selection.

17 In other words, there's code that responds to the user

18 selection of the said selected, so that's, again, referring

19 back here. And it does that by transmitting payment data

20 relating to payment for the said selected at least one

21 content item. That payment data is going to be sent for

22 validation by a payment validation system.

23   Now, there's a matching element here, which is once that

24 payment data is transmitted for validation by a payment

25 validation system, there's code on the device to receive the

 1 payment validation data, and that payment -- validation data

 2 defines it -- payment validation system has validated payment

 3 for the -- the content item.

 4 Q.   And what is the -- the next part of the sequence?

 5 A.   Well, once the device has received that payment

 6 validation data, there's code that is responsive to that

 7 payment validation data to actually go ahead and retrieve the

 8 said selected at least one content data item.

 9   So, in other words, now that it -- the device is paid

10 for and -- and gotten the payment validation data, it will

11 now get the content that it actually wanted. And this,

12 again, is referring -- this said part refers back up to the

13 selection of content data item.

14 Q.   All right. What happens next in the -- in the

15 invention, Dr. Jones?

16 A.   At this point, the -- the item is on the device, so the

17 song or the movie, whatever it may be. Now, these elements

18 address the control, the -- the rules that are associated.

19 Q.   Can you please explain that?

20 A.   Yes. So this is code to receive a second user selection

21 where that's of the, again, said retrieved content data

22 items. So this is saying that there's code to -- if the user

23 wants to access that content and wants to play that song or

24 TV show or game, that there's code to allow them to select it

25 and then there's code to also read use status data and use

1 | rules from the data carrier -- from memory on the device.

2 | And at that point, also, code to evaluate those use

3 | rules to determine whether that -- access to that item is

4 | permitted. So that's a way of enforcing the rules on whether

5 | or not someone can access the -- the downloaded content.

6 | Q.   And the section you're identifying as red here, is the

7 | said retrieved content tied to the previous sequence relating

8 | to payment?

9 | A.   Yes, it is, because here, the said retrieved content

10 | goes up here. And you can already see there's a said

11 | retrieved at least one data item that is written into the

12 | data carrier at that point.

13 | Q.   And in the section you're marking red, what happens

14 | after the evaluation of the use rules and use status data?

15 | A.   Well, at -- at that point there's a check to determine

16 | whether access is permitted. And if it is, then there'll

17 | be -- at that point the user would have been able to access

18 | it.

19 | Q.   And how does Claim 32 fit into what you've described so

20 | far?

21 | A.   Well, remember, Claim 32 is -- is a dependent claim.

22 | Q.   What does that mean?

23 | A.   Well, that means that it -- we know it's a dependent

24 | claim because it says as claimed in Claim 30. It includes

25 | all the limitations of Claim 30, as well as this additional

1   limitation.   That additional limitation describes more

2   details about the hardware, in particular that the data

3   access terminal is integrated with a mobile communications

4   device and an audio/video player.

5   Q.   And is what you've described how different pieces of the

6   claim work together, Dr. Jones?

7   A.   Yes, it is at -- at a very high level.   We'll see more

8   of the inner connections later on, but at a high level,

9   that's -- that's how the -- the invention operates.

10   Q.   Is the invention the entire claim?

11   A.   Yes, it is.   The -- the claims define the invention.

12   Q.   And were you here in court yesterday?

13   A.   Yes, I was.

14   Q.   And did you hear the instructions to the jury that the

15   claim is the invention?

16   A.   Yes, I did.

17   Q.   Please return to the witness stand.

18   Dr. Jones, is what you've described at a high level of

19   the pieces of the claim working together to constitute the

20   invention, in line with Mr. Racz's testimony at the very

21   beginning of his -- of his testimony yesterday?

22   A.   Yes, it is.

23   MR. CURRY: Mr. Mortensen, can you please pull up

24   Page 59, Lines 12 through 16, from Mr. Racz's testimony?

25   Q.   (By Mr. Curry) And, Dr. Jones, can you remind the jury

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 1   what Mr. Racz said, at a very high level, his invention was?

 2   A.    So when asked what did you invent that is at issue in

 3   this case, Mr. Racz stated that he invented particular

 4   devices and methods for combining payment functionality,

 5   secure downloading, storage, and rules for the use of content

 6   on one portable device that you would carry with you.

 7   Q.    And that's in line with your description of how the

 8   claim works, correct?

 9   A.    Yes, it is.

10            MR. CURRY:   Mr. Mortensen, can we return to Dr.

11   Jones's slide deck?

12   Q.    (By Mr. Curry)   What is source code?

13   A.    Source code is the -- is written in a programming

14   language -- that's a language that programmers understand and

15   can read -- that's then turned into executable code.

16   Q.    Are there different types of code?

17   A.    Yes.   Well, there are different programming languages,

18   as well as -- well, programming language and source code are

19   things that programmers can -- can read.   They're in human

20   readable form; whereas, executable code, the code that would

21   actually be on a device or executed by a processor, is

22   typically seen as -- as 1s and 0s.   Most people can't read

23   that.

24   Q.    How much source code did you review?

25   A.    In -- in this case, several hundred files.
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 1   Q.   And do you understand that some of the source code

 2   you've reviewed has been made into trial exhibits in this

 3   case?

 4   A.   Yes.

 5   Q.   Are you going to explain how that source code works, in

 6   your presentation today?

 7   A.   Yes, I am.

 8   MR. CURRY: For the record, the source code

 9   exhibits are Plaintiffs' Exhibit 18.1 through 18.32.

10   Q.   (By Mr. Curry)   Did you document your investigation, Dr.

11   Jones?

12   A.   Yes, I did.   I prepared a report in this case.

13   Q.   Did you sign your report?

14   A.   Yes, I did.

15   Q.   Does your report contain your analysis of how Smart --

16   how Apple infringes Smartflash's patents?

17   A.   Yes, it does.

18   Q.   Now, do you understand that Smartflash provided your

19   report to Apple?

20   A.   Yes, that's my understanding.

21   Q.   Have you heard of anyone at Apple disagree with how you

22   say Apple's products work?

23   A.   No, I haven't heard anyone disagree with my statements

24   of how they work.   They do disagree with my analysis of how

25   that applies to the claims.

1   Q.   Are you prepared to explain your infringement analysis

2   and opinions set forth in your report, here today?

3   A.   Yes, I am.

4   Q.   What is the next section of your presentation,

5   Dr. Jones?

6   A.   Giving a high-level summary of my opinions.

7   Q.   Dr. Jones, will you please give us an overview of the

8   conclusions you reached in your investigation.

9   A.   Yes. At a high level, it's my opinion that Apple's

10 products infringe Claims 26 and 32 of the '772 patent.

11   And I've highlighted up here several apps or programs on

12 the devices that are involved in that infringement, including

13 music, the iTunes Store through which music, TV shows, movies

14 can be purchased; the App Store through which applications

15 can be purchased; videos through which movies and TV shows

16 can be played; and iBooks through which both can be purchased

17 and displayed.

18 Q.   What other conclusion have you reached?

19 A.   It's my opinion that Apple infringes Claim 13 of the

20 '720 patent and Claim 32 of the '221 patent, and there the --

21 the issue -- at issue are movies with respect to the iTunes

22 Store.

23 Q.   Have Apple's products at issue in this case always had

24 these functionalities?

25 A.   Not always, but with respect to the -- the dates at

 1 issue, these functionalities have been in place.

 2 Q.   Now, based on your investigation, are there differences

 3 between the accused products that are relevant for purposes

 4 of infringement, such as different versions?

 5 A.   No.   With respect to the dates at issue, there have not

 6 been any changes that affect infringement with respect to the

 7 versions and dates at issue.

 8 Q.   Dr. Jones, have you prepared a live demonstration to

 9 show the jury what these applications look like from the

10 user's perspective?

11 A.   Yes, I have.

12   MR. CURRY: Your Honor, may I approach the witness

13 with a mobile device for a live demonstration?

14   THE COURT: You may.

15   MR. CURRY: Thank you.

16   THE WITNESS: Thank you.

17 Q.   (By Mr. Curry) Dr. Jones, please tell the jury the setup

18 that's appearing on the screen.

19 A.   Well, this is an Apple TV, and I need to connect to that

20 Apple TV to display what's on this device on the TV.

21   So at this point, the -- what's on the screen is what's

22 on my screen on this device, which is an iPod Touch 5th

23 Generation model.

24 Q.   Will you take the jury through how you can purchase an

25 app on the App Store, please?

 1   A.   Yes.

 2   So the first thing to do is select that blue icon with

 3   the A on it, the App Store.   So I'll touch that, and that

 4   will bring up a display of the top charts, so apps that are

 5   available for purchase.

 6   Q.   Will you please select an app, Dr. Jones?

 7   A.   Sure.   I'll select the game of Life.   That's 99 cents.

 8   And now I've clicked that, and now it's available for me to

 9   buy.   I click buy.

10   And at this point, if all is going well, it's

11   downloading.   It's going to ask me for my password.

12   Hopefully, I'll get that right.   My thumb is a little bit

13   big.

14   Q.   And what are we seeing on the screen now?

15   A.   It's preparing to download and should be downloading

16   that app now.   And you can see it's making -- making progress

17   as that circle darkens.   When it's done, the entire app will

18   have been downloaded.

19   Q.   Thank you, Dr. Jones.

20   Could you return to the first screen, the home screen of

21   the Apple product?

22   Now, will you please show us what it looks like to buy

23   content from the iTunes Store.

24   A.   Yes.

25   So similar to the Apple store, I'll select the purple

 1 icon for the iTunes Store, and that will bring up various

 2 movies, music, TV shows that are available for purchase, and

 3 it will take it a second to download it. Or maybe more than

 4 a second.

 5   There we go.

 6 Q.   What are we seeing on the screen here, Dr. Jones?

 7 A.   Well, this is a screen that comes up to show featured

 8 movies that are available for purchase or rent.

 9 Q.   Okay. And will you select one, please?

10 A.   Sure.

11   I still need to try the one up here. So I get more

12 details on one of the featured movies.

13 Q.   And what else are we seeing on the screen, Dr. Jones?

14 A.   Additional description and details on the movie, plot

15 summary; but also the ability to buy for 14.99 or rent for

16 5.99.

17 Q.   Will you please select one of those options?

18 A.   So we'll select rent for 5.99.

19 Q.   And what happened with that button?

20 A.   That turns into rent movie. And if I press that button,

21 at that point, it is going to be available for downloading.

22 Q.   Now, I noticed you didn't have to type in your password

23 again. Why is that?

24 A.   Well, if you make another purchase within 15 minutes or

25 so of -- of making a previous purchase where you provided

 1   your password, you won't be asked for your password again.

 2   Q.   And is the movie downloading to your device?

 3   A.   It is. We can see that it's downloading at that point.

 4   Q.   Okay. You can pause the download, Dr. Jones.

 5   A.   Okay.

 6   Q.   Now, will you return to the home screen, please?

 7   A.   Yes.

 8   Q.   If the movie had completed downloading, what is the app

 9   that you would play it with?

10   A.   I would use -- in the right-hand side, you see the

11   videos app; and if I press that, it will show both items that

12   have been downloaded for movies and for TV.

13   Q.   Okay. And if you had purchased music instead of a

14   movie, what app would you use to actually play the songs?

15   A.   So returning to the home screen, in the lower right-hand

16   corner is the music app, and I would press the music app to

17   play a movie -- or play a song.

18   Q.   And then can you briefly describe the iBooks app?

19   A.   Yes.

20   So the iBooks app is similar. With the iBooks app, it

21   will show me the books that I've downloaded, as well as take

22   me to a store so that I can purchase additional books.

23   Q.   Thank you.

24   MR. CURRY: Mr. Mortensen, will you darken the

25   screen, please?

 1   Q.   (By Mr. Curry) Now, when you said that part of your

 2   investigation, including the testing of features, is this

 3   what you were talking about, just using the features like a

 4   regular user would?

 5   A.   Well, I certainly did that, but also, while I was doing

 6   that, I did what are called network captures. I captured the

 7   traffic on the network between devices and servers.

 8   Q.   And how did you do that?

 9   A.   I used a couple of programs. One is a device called

10   Wireshark, which will gather the traffic on the computer

11   network going to and from the device.

12   I used another program called Fiddler, which is a proxy

13   that also does similar functionality to capture network

14   traffic.

15   Q.   Can you see anything with network capture that you can't

16   see as a regular user?

17   A.   Well, sure. There are a lot of communications going

18   behind the scenes that are not visible to the user. The user

19   doesn't really care about them, but they're helpful for me to

20   understand in my analysis.

21   Q.   Were you able to capture all communications between a

22   mobile device and Apple servers?

23   A.   Well, I could capture all of the communications. Some

24   of the mobile communications were encrypted in a way that I

25   couldn't observe them, but I could do similar observations

 1 for the same functionality on an iMac computer.

 2 Q.   And do you understand that the network captures that you

 3 captured in -- in your investigation, have been made into

 4 trial exhibits in this case?

 5 A.   Yes.

 6 Q.   And when you explain the communication between Apple's

 7 devices and Apple's servers, are you going to be considering

 8 that information in the network captures?

 9 A.   Yes.

10   MR. CURRY: For the record, the network capture

11 exhibits are PX-20.1 through 20.11.

12   And, Mr. Mortensen, can we have Dr. Jones'

13 presentation again.

14 Q.   (By Mr. Curry) What is the next section of your

15 presentation, Dr. Jones?

16 A.   Well, we're going to briefly go through three relevant

17 technology concepts.

18 Q.   Which ones in particular?

19 A.   Well, I'm going to go through encryption and digital

20 rights management, clients and servers, as well as store --

21 storage of media.

22 Q.   What is encryption?

23 A.   Well, encryption is a way that you take a -- say, like a

24 plain text, like maybe an email that anybody could read, and

25 turn that into something that's not readable by others by

 1 using a -- a secret key. And computers are particularly good

 2 at that.

 3   So in this example of -- by using a secret key, turned

 4 cat into dbu. Then the next step would be to decrypt it so

 5 that I could read, say, the email or encrypting a movie, and

 6 that's just using a -- a secret key, as well, to recover the

 7 original text.

 8 Q.   And what is DRM?

 9 A.   Well, DRM stands for Digital Rights Management. It

10 often uses encryption and encryption keys to protect digital

11 content. It's not the only way to do digital rights

12 management, but encryption is often involved.

13 Q.   What is the technology concept?

14 A.   It's clients and server.

15 Q.   What -- what is a client?

16 A.   Well, a client is a -- typically a user device, not

17 always, but typically that talks to a server, and it does it

18 by making requests.

19   So I've given three examples of clients here, a laptop,

20 a phone, and a desktop computer, all things a user may be

21 sitting at. Those client devices send requests to a server,

22 and that could be like a web server. You could be at your

23 browser on a -- on a laptop, sends a request and -- and back

24 comes a response from the server.

25 Q.   And what do we need to know about storing media?

1   A.   Well, at a high level, a lot of the things we're talking

2   about in this case are storing songs or -- or movies, TV

3   shows, that kind of information. And what a computer does is

4   instead of, say, putting that on an -- on an album or

5   something like that, it will convert that information to

6   really a series of 1s and 0s, called digitizing it. And then

7   in the context of -- of these patents, those are going to be

8   stored in memory. So you'll store a file of that.

9   Q.   And what are you depicting on the screen with

10   non-volatile memory and volatile memory?

11   A.   Well, those are a couple of different categories of

12   memory. Non-volatile memory -- an example of that might be

13   Flash memory -- is memory where when you turn off the

14   computer, where you stop giving it external power, it still

15   retains the information.

16   So, say, you downloaded music onto a device, when you

17   turn off the power and then turn it back on, the information

18   is still there.

19   Volatile memory is memory where you -- if you take away

20   the power, the contents of the memory are gone.

21   Q.   Why would anyone ever use volatile memory?

22   A.   Well, it has some advantages in the design in terms of

23   speed and cost, but there's lots of information that's sort

24   of temporary -- temporary data or temporarily storing things

25   that computers do where volatile memory is -- is just fine

 1 for that task.

 2 Q.   And what is the next section of your presentation, Dr.

 3 Jones?

 4 A.   So this is the infringement analysis, starting with the

 5 individual claim terms.

 6 Q.   What -- what are the individual claim terms that you

 7 would like to discuss?

 8 A.   Well, they're payment data, payment validation system,

 9 payment validation data, and then use rules and use status

10 data.

11 Q.   What is the purpose of this section?

12 A.   Well, these terms appear in multiple places repeatedly

13 through the claims, and it's more efficient to go over them

14 here. We'll see them again later, but we'll cover them once

15 and then refer back to this.

16 Q.   And do Apple's products meet these claims?

17 A.   Yes, they do. Apple's products have these limitations

18 within the context of the claims.

19 Q.   Sorry, I misspoke. Do Apple's products meet these claim

20 terms?

21 A.   Yes, they do.

22 Q.   How?

23 A.   Well, it'd be easiest if I could explain that in a

24 drawing.

25   MR. CURRY: Your Honor, may Dr. Jones re-approach

1   the flip chart?

2   THE COURT: You may.

3   MR. CURRY: Thank you.

4   MS. FUKUDA: Your Honor, may I --

5   THE COURT: Same -- same procedure, counsel.

6   Q.   (By Mr. Curry) Dr. Jones, if a user selects to buy

7   content from the iTunes or the App Store and enters their

8   password, can you explain what goes on behind the scenes?

9   A.   Yes, I can. So I'll start with the drawing here and --

10   excuse my poor handwriting. I've got on this side, say, a

11   phone or a -- or a tablet device. And on this side will be

12   Apple servers. When a user selects a product to purchase,

13   behind the scenes there is information that is sent from the

14   phone, which is really a client, to the servers over here.

15   That request is called a buy product request.

16   Q.   What's in that request, Dr. Jones?

17   A.   Well, that request contains payment data and it -- as

18   well includes indication of -- of the item that you're --

19   you're purchasing.

20   Q.   What particularly is the payment data in that buy

21   product request?

22   A.   Three elements, the -- something called the DSID, the

23   GUID, and the MID.

24   Q.   What is the DSID?

25   A.   It's a numerical value that is a -- a representation of

 1   the user -- or identifies the user's account at Apple.

 2   Q.   What is the GUID?

 3   A.   It's a unique number that identifies the user's

 4   particular device.

 5   Q.   And then what is the MID?

 6   A.   The MID is a number that links -- effectively links the

 7   DSID and the GUID and is used for -- for fraud prevention.

 8   Q.   What at Apple receives that buy product request?

 9   A.   Well, generally functionality called MZ Buy, which is a

10   payment validation system.

11   Q.   What makes MZ Buy a payment validation system?

12   A.   Well, it does several validation checks. First, it

13   looks up the user's account using the DSID. Within that

14   account, it will check the GUID and -- and MID.

15   It will also do a check to determine whether or not the

16   user has a gift card balance using -- also known as the --

17   the xCard. If the user has enough balance information, say,

18   from a gift card, then they can use that information to pay.

19   Q.   Why does MZ Buy check the GUID and MID with the DSID?

20   A.   Well, to prevent fraud.

21   Q.   Is that similar to anything that we would know as credit

22   card users or debit card users?

23   A.   Well, in some ways it's similar to like the three-digit

24   or four-digit CVV code that's on a credit card to say, you

25   know, that you may have to provide extra in some websites or

 1 │ situations.

 2 │ Q.   And when it validates the DSID, what's the purpose of

 3 │ that?

 4 │ A.   It's -- the purpose is to be able to make payment for

 5 │ the content.

 6 │ Q.   What does MZ Buy do after validating the payment data?

 7 │ A.   Once it's gone through the -- the entire process, and

 8 │ there are -- there are additional checks even, it will send

 9 │ back a response to the client.

10 │ Q.   Does that response have a name?

11 │ A.   It's a response to a buy product request or -- or just a

12 │ response.

13 │ Q.   What's in that response from MZ Buy?

14 │ A.   It has payment validation data.

15 │ Q.   What, particularly, is in that response, Dr. Jones?

16 │ A.   Well, there are quite a few items in it. For example, a

17 │ success code. There's also the -- the price paid and a

18 │ couple of items of particular interest are a URL and a

19 │ download key.

20 │ Q.   Does that response actually deliver the content to the

21 │ Apple client device?

22 │ A.   No. What it's doing is just giving you the location at

23 │ which to get the content at this point, and that -- that's

24 │ this URL which is a location out on the Internet to go and

25 │ actually get the content.

1 Q.   And what does the Apple device do in response to

2 receiving that response from MZ Buy?

3 A.   It -- it stores this information. So it stores the

4 response and then goes and makes a request to retrieve the

5 media.

6 Q.   Where does that request go to, Dr. Jones?

7 A.   That request goes to a content delivery network.

8 Q.   What is that?

9 A.   That is a network that is -- contains the actual movie,

10 TV shows, applications. That network is -- is run by Akamai

11 for Apple.

12 Q.   What do you mean that the CDN is run by Akamai for

13 Apple?

14 A.   Well, it essentially operates as -- as what we would

15 call a cache. Apple provides the content to Akamai's servers

16 under contract to Apple; and then users, instead of

17 contacting Apple directly, they contact the content delivery

18 network to get the content.

19 Q.   What happens next, Dr. Jones?

20 A.   At that point, the content is actually downloading -- or

21 downloaded to the user's device. So when that step is done,

22 the movie or music or app is on the user's device in an

23 encrypted form.

24 Q.   Once the content is downloaded on the Apple device, is

25 it subject to use rules?

1   A.   Yes, it is.

2   Q.   How many types of use rules?

3   A.   Well, there are three different types of use rules.

4   There -- in the case of movie rentals, rental keybag that

5   governs the rental time periods.

6   In the case of what are known as parental controls,

7   we'll go through those in a second, as well as FairPlay rules

8   that help encrypt and decrypt the information.

9   Q.   And can you please explain how those rules work on the

10   user's device?

11   A.   Yes, I can.

12   So I'll start with the rental. And the key element

13   there is what's known as a -- a rental keybag.

14   Q.   Okay. What is that?

15   A.   The rental keybag contains both rules and use status

16   data, and the rules govern a couple of time periods. One is

17   a 30-day time period, and another is a 24-hour time period.

18   Q.   And what is the use status data?

19   A.   The use status data is -- relates to those rules; and

20   for the 30-day limit, the use status data is the date on

21   which you rented the item. And that 30-day limit says you

22   have 30 days from that date to view the movie.

23   Q.   And how does the use status data and the use rules work

24   together?

25   A.   Well, as an example, the 24-hour limit, there's use

 1   status data for that that indicates when you started

 2   watching. And if you have started -- if you have started

 3   watching it, it will indicate the time and date that you

 4   started watching.

 5   And taken together, what that will -- will do is enforce

 6   a limit of 24 hours from the time you actually start watching

 7   the movie during which you can watch that movie. After that

 8   limit has expired, you're no longer able to view or watch the

 9   movie.

10   Q.   And what was the second type of use rules that you

11   mentioned?

12   A.   Parental controls.

13   Q.   Okay. Can you please explain how that works?

14   A.   Yes.

15   So there are use rules for parental controls that a

16   parent can set on a device through the settings and

17   restrictions capabilities on the device to -- to limit the

18   type of content that can be viewed.

19   For example, for movies, you could set a maximum rating

20   of movies that they watch on the device; for example, nothing

21   that is any higher than PG.

22   Similarly, you can set ratings for music, for TV, books,

23   and apps. And apps, for example, you can say: I don't want

24   anything more than apps rated for ages 9 and lower.

25   Q.   What is the use status data for parental rules?

1   A.   So the use status data is associated with particular

2   items of content.

3   For example, for a given movie -- so a particular movie,

4   it's the rating. Does that movie say PG-13, or for a

5   particular app, what's the age rating? Is that app 4 plus?

6   That would be the rating, and that would be the use status

7   data.

8   Those are evaluated together to determine whether or not

9   a particular app or movie can be watched on the device when

10 the restrictions are in effect.

11 Q.   What is the third type of rules that you mentioned?

12 A.   These are the FairPlay rules that I mentioned.

13 Q.   How does that work, Dr. Jones?

14 A.   Well, again, it has use rules and use status data, and

15 the use rules are embodied in something called a keybag. And

16 I'll just give you a high-level picture of that.

17   In this keybag, which literally contains keys that are

18 used to decrypt materials, there's -- there are account ID

19 sections, and within that account ID, there can be

20 identifiers of key -- particular keys in what are essentially

21 tables. And associated with a particular account and key ID,

22 you can look that up and find the key you want.

23   And the use status data is contained in something called

24 a Sinf, which is just short for security information.

25 Q.   Can you please depict how that looks?

1   A.   Yes.

2   So at a high level, there are a couple of parts to a

3   Sinf: A public portion and a private portion.

4   Lots of information in there, but examples include, in

5   the public portion, an identifier of the account, an

6   identifier of the key, are two examples that are in the

7   public area.

8   In the private area, additional elements of interest

9   there is what's known as the content key.

10   Q.   How are the -- how is the data in the keybag a use rule?

11   A.   Well, the data in the keybag defines the particular key

12   within the particular account to be used for -- these key IDs

13   are associated with -- essentially with content types.

14   And so that defines ultimately the keys that are

15   available on this device of who may watch and what keys they

16   have available for that.

17   Q.   If an Apple device were to play content that's protected

18   by FairPlay, how would that work?

19   A.   Well, the -- it first has to unlock the content. As we

20   saw earlier, that content is encrypted.

21   Now, it has to go through several steps. This -- this

22   Sinf, which is specific to a particular item, it actually

23   comes back in the buy product response. This defines and

24   indicates the account and key ID that are to be used.

25   FairPlay looks those up in the keybag, identifies a key.

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 1   And we're not quite done yet.  It uses that key to decrypt

 2   the content key.  This is the key that's actually used to

 3   decrypt the particular item.

 4       So this will be used to get the unencrypted version of

 5   the movie, and that's going to be -- all this is kept behind

 6   the scenes in FairPlay.  The user doesn't see this and can't

 7   access it.

 8   Q.   Does FairPlay work the same way for all content types?

 9   A.   At a high level, yes, it does.

10   Q.   Does all content at Apple have -- have FairPlay rules

11   associated with it?

12   A.   Well, not all content.  The -- for the last several

13   years, for example, music has typically provided what they

14   call DRM free, is provided in a form that the user can move

15   to different devices.

16       So they don't enforce these same rules on music that you

17   purchase now, typically.

18   Q.   Thank you, Dr. Jones.  Please return to the witness

19   stand.

20   A.   (Complies.)

21   Q.   What is the next section of your presentation?

22       I'm sorry.  Before we get there, what's on the screen

23   for payment data?

24   A.   Well, this is -- the Court has told us that payment data

25   means data that can be used to make payment for content.
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1   Q.   Did you apply that construction in your analysis?

2   A.   Yes.

3   Q.   Does the Court's construction allow payment data to be

4   linked to a card or cardholder identification data?

5   A.   Yes, as long as the -- what's identified as the payment

6   data meets the Court's construction, which is data that can

7   be used to make payment for content, then yes.

8   Q.   How do you know that the DSID, GUID, and MID are payment

9   data?

10 A.   Well, first, by looking at the operation of the system

11 and through my analysis by -- by examining the evidence and

12 seeing how they're used.

13 Q.   And what did you conclude?

14 A.   I concluded that the DSID, GUID, and MID form payment

15 data.

16 Q.   Were you here for opening?

17 A.   Yes, I was.

18 Q.   Did you hear Mr. Batchelder tell the jury that Apple

19 doesn't infringe because they don't store credit cards on the

20 devices?

21 A.   Yes, I did.

22 Q.   Under the Court's construction, is that required?

23 A.   No.   The Court's construction for payment data doesn't

24 say that credit card information is the only thing that can

25 be payment data.   It also doesn't say that it has to be --

 1 that credit cards have to be stored.

 2 Q.   And outside of the context of this litigation, what does

 3 Apple internally recognize that the DSID is used for?

 4 A.   They indicate that it's used for --

 5   MS. FUKUDA: Your Honor, can you please take that

 6 down?

 7   I believe we're about to get into

 8 highly-confidential Apple documents.

 9   THE COURT: Speak up, Counsel.

10   MS. FUKUDA: We believe that we may be getting into

11 some highly-confidential Apple source code and technical

12 documents, and Apple requests that the courtroom be sealed

13 for that purpose.

14   MR. CURRY: No objection.

15   THE COURT: All right. Then at the request of

16 counsel, the Court is going to order the courtroom sealed.

17   If you are in the courtroom and not presently

18 subject to the protective order in this case, then you should

19 exit the courtroom at this time and remain outside until I

20 unseal the courtroom.

21   MR. CURRY: Your Honor, for clarification, is Apple

22 requesting that Mr. Racz leave the courtroom as well?

23   MS. FUKUDA: Yes, Your Honor. Apple requests that

24 because Mr. Racz is subject to -- he's not covered under the

25 protective order for this purpose.

 1   THE COURT: All right. Well, if he's not covered

 2   by the protective order, then he's subject to it like

 3   everybody else.

 4   MR. CURRY: Understood.

 5   THE COURT: Mr. Racz, you'll have to excuse

 6   yourself as well.

 7   And, Counsel, I'll trust you to advise the Court

 8   when we've passed this point so that we can reopen and unseal

 9   the courtroom. As I've indicated, I want to keep it sealed

10   for the minimum amount of time necessary.

11   MR. CURRY: It will be a long section, but we will

12   keep it at a minimum, Your Honor.

13   THE COURT: All right. Again, if you are not

14   subject to the protective order in this case, please exit the

15   courtroom.

16   (Those designated by the Court, leave the

17   courtroom.)

18   THE COURT: All right. All such persons appear to

19   have exited. The Court, for the record, indicates the

20   courtroom is now sealed.

21   (Courtroom sealed.)

22   (This portion of the transcript is Sealed and filed

23   under separate cover as Sealed Portion No. 1.)

24   (Courtroom unsealed.)

25   THE COURT: I'm now going to call the Court to

1 recess.   We should be in recess for about 10 minutes.

2   Ladies and Gentlemen of the Jury, I remind you not

3 to discuss the case among yourselves, to follow all my other

4 instructions.   You may leave your notebooks in your chairs.

5 We'll be back in here shortly.

6   But the Court is un -- courtroom is unsealed, and

7 the jury is excused for recess.

8   COURT SECURITY OFFICER: All rise for the jury.

9   (Jury out.)

10   THE COURT: All right.   Counsel, we'll stand in

11 recess for approximately 10 minutes.

12   MR. CURRY: Thank you.

13   (Recess.)

14   (Jury out.)

15   COURT SECURITY OFFICER: All rise.

16   THE COURT: Be seated, please.

17   All right.   Before we continue, I'll order the

18 courtroom sealed again.

19   If you're present and not subject to the Court's

20 protective order in this case, you should exit the courtroom

21 and remain outside until the Court is un -- the courtroom is

22 unsealed.

23   (Courtroom sealed.)

24   (This portion of the transcript is Sealed and filed

25   under separate cover as Sealed Portion No. 2.)

1   (Courtroom unsealed.)

2   THE COURT: Ms. Mayes, if you'd let people outside

3   the courtroom know they may return.

4   (Pause in proceedings.)

5   THE COURT: All right. Mr. Curry, let's continue.

6   MR. CURRY: Thank you, Your Honor.

7   Q.   (By Mr. Curry) Dr. Jones, what is the next section of

8   your presentation?

9   A.   This section is -- focuses on the acts of infringement.

10   Q.   If a product infringes, like you just went through and

11   explained, how can that make a company liable for that

12   infringement?

13   A.   Well, that's governed by the statute, that if the -- a

14   company makes, uses, offers to sell, or sells any patented

15   invention, an invention that -- for example, that infringes a

16   patent, within the United States or if it imports it into the

17   United States, those are the acts of infringement.

18   Q.   Now, I see that all these actions are tied to the United

19   States. Does Apple manufacture its -- the products in this

20   case in the United States?

21   A.   No, it does not.

22   Q.   Does that mean that it doesn't infringe?

23   A.   No. Apple still -- there's a making, which I'll

24   describe in -- in a bit, but they also use it through their

25   own testing. They sell and offer to sell the products as

1   well. Additionally, they also import them.

2   Q.   Now, about how many infringing products has Apple sold

3   in the United States?

4   A.   It's hundreds of millions.

5   Q.   And is it your understanding that Smartflash's damages

6   expert will give an exact figure on that amount?

7   A.   Yes, it is.

8   Q.   Is each sale an act of infringement?

9   A.   Each sale that occurs, given the -- within the specified

10   timeframes of the patents, yes. And I believe Mr. Mills will

11   go into detail on that.

12   Q.   Now, what about use? Does Apple use these products in

13   the United States?

14   A.   They do by, for example, their own testing.

15   Q.   What about its customers?

16   A.   Apple's customers to whom they sell the devices use the

17   devices themselves, of course, and that's an infringing use.

18   Q.   And is it your understanding that Apple can be liable

19   for its customer's use of its products?

20   A.   Yes, they can. They can do that through what's known as

21   indirect infringement. If someone actively induces

22   infringement of a patent, then they'll also be liable as an

23   infringer. That inducement would be, in this case, causing

24   someone to use or -- use the device, for example, or a make.

25   Q.   What is some of the evidence that the jury can look at

 1   to figure out whether Apple induces its customers to infringe

 2   Smartflash's patents?

 3   A.   The jury can consider evidence related to Apple's

 4   encouragement of customers to use the devices in the ways

 5   that we discussed earlier, like to purchase or rent videos,

 6   to download and purchase apps, to purchase music, as well as

 7   the use rules we discussed.

 8   Q.   Now, will you be offering an opinion as to whether that

 9   means that Apple intended to cause others to infringe

10   Smartflash's patents?

11   A.   No.   That's -- that's not my role of an expert to

12   determine the intent.   Mine is to lay out the evidence.   But

13   it's the jury's job to make that decision.

14   Q.   Now, for inducing infringement, does Apple actually

15   have -- have to actually know about Smartflash's patents or

16   know that it's causing others to directly infringe?

17   A.   Yes, they do.   Apple has to know or be willfully blind

18   to the fact that its customers are infringing -- or it's

19   encouraging its customers to infringe the patents.

20   MS. FUKUDA: Objection, Your Honor.   There is --

21   THE COURT: You're going to have to speak up.

22   MS. FUKUDA: Yes.   There's a motion directed to

23   this type of testimony, so we object.

24   MR. CURRY: Your Honor, Dr. Jones is explicitly

25   explaining why he's not giving an opinion on intent or

 1 | willful blindness. The Court's order specifically allowed

 2 | him to present evidence that the jury can make that finding

 3 | from. He's giving no opinion himself.

 4 | THE COURT: Well, given the prior rulings he's not

 5 | entitled to, I'm going to overrule the objection. It's

 6 | offered untimely, anyway. But be mindful of the prior

 7 | restraints on this scope of testimony.

 8 | MR. CURRY: Absolutely, Your Honor.

 9 | THE COURT: All right. Let's proceed.

10 | Q.   (By Mr. Curry) What is willful blindness?

11 | A.   It's defined as when a defendant subjectively believes

12 | that there is a high probability that a fact exists and takes

13 | deliberate actions to avoid learning that fact.

14 | Q.   Will you be offering an opinion on willful blindness?

15 | A.   No, I won't. That's something that the jury will have

16 | to consider and reach a conclusion about.

17 | Q.   And what is some of the evidence that the jury could

18 | consider in making its determination about willful blindness?

19 | A.   They could consider whether the Defendant, Apple, and

20 | its employees, for example, took actions to avoid learning

21 | about the facts in the case, for example, the patents or

22 | looking into the nature of the infringement.

23 | Q.   Okay. And what is the next section of your

24 | presentation, Dr. Jones?

25 | A.   This is going to focus on Apple's arguments, and

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 1   actually, in particular, focus on the non-infringing

 2   alternatives that I considered in this case.

 3   Q.    What is a non-infringing alternative?

 4   A.    Well, a non-infringing alternative is a way that a

 5   defendant could choose to do something that would not

 6   infringe.   It's -- it's an alternative to infringement.

 7   Q.    Now, with infringement, does Mr. Racz have to make a

 8   product with all of the elements that we went through for his

 9   patent to be any good?

10   A.    No.   You don't have to actually make a product that

11   embodies every single claim in your patent or even make a

12   product.   You have to, in a patent, fully describe that

13   product and then -- or fully describe your invention and then

14   claim it.

15   Q.    And do you know professors at Virginia Tech who have

16   patents?

17   A.    Certainly.   And in a university, it's common to not make

18   products, but we do file for patents and faculty members to

19   get patents based on their inventions without making the

20   products.

21   Q.    Now, turning back to non-infringing alternatives, has

22   Apple changed the way its products work in response to this

23   litigation?

24   A.    No, they have not changed their products in response to

25   the litigation.
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 1    Q.    What's the point in talking about what Apple could have

 2    done to avoid infringement?

 3    A.    Well, we're going to hear a little bit later, with

 4    respect to figuring out the damages in this case, from two

 5    witnesses:  Dr. Wecker and Mr. Mills.  And the purpose for me

 6    to identify these alternatives was to help them compare the

 7    value of the -- doing it with the invention and without the

 8    invention.

 9    Q.    Can a non-infringing alternative help someone like

10    Dr. Mills -- Mr. Mills isolate the value of a patent?

11    A.    Yes.  They can compare the infringing way of doing

12    things to the maybe next best alternative of doing things to

13    determine how much value there is in the invention.

14    Q.    Now, did Apple identify any alternatives to infringement

15    in this case?

16    A.    No, they did not.

17    Q.    Did you?

18    A.    Yes, I did.

19    Q.    Starting with Apple's infringing video rentals and

20    purchasing functionality, what's Apple's best alternative to

21    that?

22    A.    In that example, it's only allow users to purchase video

23    content.

24    Q.    Wouldn't that still infringe the claims of the '772

25    patent, though?
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1   A.   It would still infringe the claims of the '772 patent,

2   but my -- the focus here when I was formulating this was just

3   on the movie rentals.

4   The '720 patent issued quite a bit before the '221 and

5   '772 patents. The only one relevant there is the '772, but

6   it issued quite a bit before that.

7   So there's a period of time where Apple could have --

8   could have avoided infringement by using this alternative.

9   Q.   Now, what's Apple's best alternative to its infringing

10   video purchasing functionality?

11   A.   That would be to allow the users to purchase and stream

12   the desired content.

13   Q.   And what is Apple's best alternative to its infringing

14   app purchase functionality?

15   A.   That's to allow users to browse for and install apps but

16   require users to complete each purchase by separately

17   visiting a website and entering payment information to unlock

18   the app.

19   Q.   What is Apple's alternative to its infringing book

20   purchase functionality?

21   A.   That would be to allow users to purchase books for

22   reading online, or alternatively, allow users to purchase

23   books from a website and then load the purchased books into

24   an app for reading the books.

25   Q.   Moving on, what is Apple's best alternative to its music

1   purchase functionality?

2   A.   To allow users to browser for and stream music through

3   apps, like Pandora and Spotify; alternatively, allow users to

4   import songs on their computers, for example, from buying

5   songs on websites, such as Amazon.com or from importing songs

6   from CDs that the user purchased, and then transfer those

7   songs to their handheld devices.

8   Q.   And what is streaming?

9   A.   Streaming is, instead of storing the content on a client

10   device, it's sending the content as you need it to a device

11   as you watch or listen to the particular music or video.

12   Q.   What is Apple's best alternative to its infringing

13   parental controls functionality?

14   A.   That's to restrict the purchasing or downloading of

15   age-inappropriate content, such as R-rated movies, but

16   provide access to all apps and content already on the device.

17   Q.   What was your rationale in formulating these

18   alternatives?

19   A.   When I went through and examined the patents, I wanted

20   to look at what the -- Apple's best alternative to these was.

21   Now, what's been chosen or that -- I believe the patent

22   represents the best way of doing things, and I wanted to look

23   for the best alternatives.

24   As part of that, I wanted to look at what was actually

25   commercially available, actually done in practice, as

 1   alternatives that were definitely available to Apple.

 2   Q.   And for some of the alternatives that you identified,

 3   you actually identified two alternatives. Why is that?

 4   A.   Well, those are two ways of -- that Apple could do this,

 5   and both ways are good ways of doing it.

 6   Q.   Why have you identified different alternatives for

 7   different types of content?

 8   A.   Different content is -- has different requirements for

 9   viewing and different ways in which users use it. It makes

10   little sense to stream an app; whereas, it makes more sense

11   to stream a movie.

12   Q.   And do you know if any of these alternatives would be

13   acceptable to Apple's consumers?

14   A.   Well, they're at least as acceptable as Dr. Wecker finds

15   them in his survey, but he's going to testify to that.

16   Q.   And did you provide these alternatives to Dr. Wecker to

17   test the acceptability of these alternatives?

18   A.   Yes. Dr. Wecker and I and -- discussed these multiple

19   times, and I provided these alternatives to him.

20   Q.   Thank you for your time, Dr. Jones.

21   Will you please turn to the jury and tell them the

22   conclusion of your analysis in this case.

23   A.   Yes. It's my opinion that Apple's products infringe the

24   asserted claims of the patents: Claims 26 and 32 of the '772

25   patent; Claim 13 of the '720 patent; and Claim 32 of the '221

1 patent.

2   MR. CURRY: Pass the witness.

3   THE COURT: Cross-examination by the Defendant.

4   Ladies and Gentlemen of the Jury: Before

5 cross-examination begins, I want to remind you that despite

6 any testimony you may hear in this trial, the Court will

7 instruct you on what the law is, and you are required to

8 follow the Court's instructions on the law. That will be the

9 sole source of any guidance as to the law to apply in this

10 case.

11   All right. We'll hear cross-examination.

12   MS. FUKUDA: Good afternoon, Your Honor.

13   We have a set of slides that we would like to pass

14 over to Dr. Jones, as well as to the Court.

15   THE COURT: You have leave to distribute those.

16   MS. FUKUDA: And my colleague, Mr. Schenker, will

17 be doing that. Thank you.

18   MR. CASSADY: Can we get a copy, too?

19   MS. FUKUDA: Yes.

20   THE COURT: And given this is your first time at

21 the podium, Ms. Fukuda, please introduce yourself to the

22 jury.

23   MS. FUKUDA: Yes, Your Honor.

24   Ching-Lee Fukuda on behalf of Apple.

25   CROSS-EXAMINATION

1 BY MS. FUKUDA:

2 Q. Good morning, Dr. Jones.

3 A. Good morning.

4 Q. And, Dr. Jones, we've met before, haven't we?

5 A. Yes, we have.

6 Q. And it was during a deposition back in September of last

7 year?

8 A. Yes.

9 Q. Good to see you again.

10 A. Good to see you.

11 Q. Dr. Jones, you were hired by Smartflash and its counsel,

12 Caldwell Cassady & Curry, for this case?

13 A. Yes, I was.

14 Q. And you testified that you're being paid $450 an hour by

15 Smartflash?

16 A. Yes.

17 Q. And that's -- did you request to be compensated for your

18 time to work on this case?

19 A. Yes.

20 Q. And is it reasonable for you to request to be

21 compensated?

22 A. Yes.

23 Q. And, in fact, you wouldn't be here testifying on behalf

24 of Smartflash at this trial if you weren't being compensated

25 for your time, right?

 1 A.   At least for the investigation, I don't -- I'm not

 2 compensated for the time on the stand.

 3 Q.   Understood.

 4   So if you weren't being compensated for the time to do

 5 your analysis and preparation, you wouldn't be here

 6 testifying.

 7 A.   That's correct.

 8 Q.   Now, over the past two years, you have not been teaching

 9 full time at Virginia Tech?

10 A.   That's correct.

11 Q.   And more than 50 -- in fact, more than 80 percent of

12 your overall income for the past two years is from consulting

13 engagements and patent cases?

14 A.   That sounds about right.

15 Q.   Now, you understand that the Plaintiff, Smartflash,

16 here, as the patent owner, bears the burden of proving that

17 the accused Apple products actually infringe.

18 A.   Yes.

19 Q.   And you agree that for purposes of showing infringement,

20 Smartflash has to prove that Apple meets each and every

21 limitation of the claims.

22 A.   Yes.

23 Q.   In fact, you would agree that a claim limitation is

24 literally met if it exists in the accused product just as it

25 is described in the claim language?

1 A.   Yes.

2 Q.   Now, during your testimony just now, I believe we saw a

3 series of boards, as well as slides. You went through each

4 of the asserted claims -- there are four of them -- and you

5 checked off all of the claim limitations?

6 A.   Yes.

7 Q.   But if any one of your check boxes is wrong for any of

8 the claims, then Apple does not infringe that claim, correct?

9 A.   Yes. For each claim, that's correct.

10 Q.   Dr. Jones, when you started your testimony, you did a

11 live demo with -- with one of Apple's iPhones?

12 A.   It was with an iPod Touch.

13 Q.   Oh, excuse me. With an -- one of Apple's iPod Touch?

14 A.   Yes.

15 Q.   And during your live demo, you went through the process

16 of purchasing a -- a movie, and you also purchased an app,

17 correct?

18 A.   Yes.

19 Q.   And we noticed that when you -- in the process you

20 demonstrated, you entered a password for your Apple ID?

21 A.   Yes, I did.

22 Q.   Now, did you already previously set up an account before

23 you did that demo process?

24 A.   Yes, I did.

25 Q.   We didn't see the setup, did we?

1   A.   No.

2   Q.   When you set up your account, did you provide either a

3   credit card number or some sort of an xCard?

4   A.   I actually did both.

5   Q.   You did both.

6   Okay. And we didn't see you do that either.

7   A.   No.

8   Q.   When you provided your credit card to set up your

9   account, did you -- I'm sorry. I'm assuming -- was it -- was

10 it your credit card that was being used?

11 A.   Yes.

12 Q.   When you set up your account with Apple before you did

13 this live demo, did you punch in -- you have to enter your

14 credit card number?

15 A.   Yes, I did.

16 Q.   And your credit card number -- and you mentioned an

17 xCard as well?

18 A.   Yes, or a gift card.

19 Q.   A gift card. Okay.

20   When you set that up, where is that information

21 residing?

22 A.   The --

23 Q.   After you set that up, where is that information

24 residing?

25 A.   That information is stored on Apple's servers.

 1   Q.   Now, if you didn't do that setup and provide your credit

 2   card information and your gift card information to the Apple

 3   server, when you pulled up that phone to do the live demo

 4   just now and you tried to buy the app or you tried to buy

 5   that movie, you wouldn't be able to purchase them, would you?

 6   A.   That's correct.

 7   Q.   Now, Dr. Jones, focusing on that particular element,

 8   payment data, all four asserted claims require sending

 9   payment data from the user's device when the user selects

10   some content that they want to purchase, right?

11   A.   Yes, at a high -- effectively, yes.

12   Q.   And you had identified the user's DSID, GUID, and MID as

13   the payment data of all the claims?

14   A.   Yes.

15   Q.   And it's your opinion that all three of those items

16   taken together constitutes the payment data?

17   A.   Yes, at least in the versions of Apple's products that

18   require or have an MID, yes.

19   Q.   Okay. And in prior versions where there was no MID, it

20   is your opinion that both the DSID and the GUID are -- taken

21   together, constitute the payment data?

22   A.   Yes.

23   Q.   And I believe you testified that the DSID is an

24   identifier that identifies the user's account; is that right?

25   A.   Effectively, it's a number that's -- identifies the

1 user's account.

2 Q.   And a DSID in the iTunes system can be used in a lot of

3 different places; is that right?

4 A.   Yes.

5 Q.   In fact, a DSID all by itself cannot be used as payment

6 data within the iTunes ecosystem, right?

7 A.   That's correct.

8 Q.   Now, can I give my DSID to a credit card company like

9 Mastercard or Visa to make payment information?

10 A.   No.   They won't let you make payment using it.

11 Q.   And if somebody steals my DSID from my iPhone or my iPod

12 Touch or if they steal it while I'm transmitting my DSID from

13 my Apple device over to the Apple server, then those people

14 who stole my ID, they can't give that ID to Visa or

15 MasterCard to make payment for anything, can they?

16 A.   That's right.

17 Q.   Okay.   The GUID, I believe, you testified that that

18 identifies the user's particular device?

19 A.   Yes.

20 Q.   And a GUID by itself cannot be used as payment data,

21 even within the iTunes' ecosystem, right?

22 A.   That's correct.

23 Q.   And like the DSID we talked about, I can't give my GUID

24 to either Visa or MasterCard to make payment for anything?

25 A.   That's right.

 1   Q.   And if my GUID is stolen by somebody, that other person

 2   also can't make that to make -- to make a payment for

 3   anything through Visa or MasterCard or any credit card

 4   company?

 5   A.   That's right.

 6   Q.   Now, for the newer releases that we were talking about

 7   that also requires an MID, you had testified that the MID is

 8   another number that's used to link the DSID and GUID roughly

 9   along those lines; is that right?

10   A.   Effectively, yes.

11   Q.   Okay.   And now, the MID by itself also cannot be used as

12   payment data within the iTunes' system?

13   A.   That's right.

14   Q.   And just like the DSID, the GUID, I also can't use my

15   MID and go directly to a credit card company to make a

16   payment for anything?

17   A.   That's right.

18   Q.   And, in fact, if I take all three of those things

19   together, the DSID, the GUID, and the MID, taken all

20   together, I can't use all three of those numbers and give it

21   to any credit card company to make a payment for anything,

22   can I?

23   A.   That's correct.

24   Q.   And if someone happens to hack into my phone or hack

25   into my transaction process and steal my DSID, my GUID, and

 1 my MID, they can't take those three things and use it with

 2 any credit card company to buy anything, can they?

 3 A.   That's correct.

 4 Q.   But your testimony still is that if I'm an iPhone and

 5 you're the iTunes server, if I send you my DSID, my MID, and

 6 my GUID, I've given you payment data?

 7 A.   Yes, if you're attempting to purchase content.

 8 Q.   Now, you agree, Dr. Jones, that a user can download a

 9 free app from iTunes, right?

10 A.   Yes.

11 Q.   And you agree that when a user downloads a free app,

12 that user is not making any payment for that free app?

13 A.   That's correct.

14 Q.   The DSID that's sent from my iPhone to the Apple server

15 is the same for the free content as it is for paid contact;

16 isn't that right?

17 A.   Yes.

18 Q.   And the GUID and the MID also are the same that's sent

19 for free content as it is for paid content?

20 A.   Yes.

21 Q.   So it's still your testimony that if I select a free app

22 for download and I send you from my iPhone -- and you're

23 Apple here -- as part of that request, my DSID, my MID, and

24 my GUID, I just gave you payment data?

25 A.   Not in the context of a free app, no. It's still

1 payment data, but you're not making payment.

2 Q.   So your testimony is that even if I'm buying a free app,

3 I send you three IDs and those three IDs together are payment

4 data?

5 A.   They constitute payment data, but not within the context

6 of the claims.

7 Q.   But -- and you just testified that down -- in your

8 opinion, there's no payment, right?

9 A.   Right.

10 Q.   Okay.   And, in your opinion, downloading free content

11 does not infringe the claims that require payment, right?

12 A.   That's correct.

13 Q.   And is it your testimony that even if you're not paying

14 for content, you are still sending payment data?

15 A.   You're still sending payment data, but it's not within

16 the context of the claims or -- or making payment.

17 Q.   If I'm buying a free app -- excuse me, withdraw that

18 question.

19   If I'm downloading a free app, is it your opinion that I

20 am still sending payment data, I'm just not making the

21 payment?

22 A.   You're still sending payment data.   It doesn't -- it's

23 not payment data within the context of the claims.

24 Q.   Okay.   But it's the same GUID, DSID, and MID that I'm

25 sending for free content and for paid content?

1   A.   Yes.

2   Q.   Now, Dr. Jones, you testified that you applied the

3   Court's construction for payment data; is that right?

4   A.   Yes.

5   Q.   And that's data that can be used to make payment for

6   content, and that's the construction?

7   A.   Yes.

8   Q.   Now, it's your opinion that those three identifiers,

9   DSID, the GUID, and MID, can be used to make payment because

10 I can give them to the Apple servers and the Apple servers

11 will use them to look up my account?

12 A.   That's not the reasons I gave.

13 Q.   Okay. Now, does the Apple server -- when you provide

14 those three IDs, does the Apple server use the DSID to look

15 up your account?

16 A.   It does.

17 Q.   Okay. And in your opinion, a system that uses your DSID

18 to look up your account information so that payment can be

19 made later on, that's covered by the asserted claims?

20 A.   Not doing that alone, no.

21 Q.   Now, you agree that in Apple's system, a user may

22 download content and not have his or her credit card charged

23 for sometimes -- sometimes a couple of days; is that right?

24 A.   Yes, there will -- there can be a delay in the

25 processing.

1   Q.   And you agree that in the meantime, at the Apple end,

2   they're maintaining a record of those accumulated downloads,

3   and that will be used to charge the user's credit card at a

4   later time?

5   A.   No, I wouldn't say it that way.

6   Q.   Okay. Let me see if I can make this a little bit higher

7   level. If Apple doesn't immediately charge you for a

8   purchase of an app or a movie, at some point later, Apple

9   will charge you when it's accumulated, as you had testified

10   to, a larger amount or some time had past; is that right?

11   A.   I would say it differently from that, as well.

12   Q.   How would you say that, Dr. Jones?

13   A.   I would say that what Apple is doing is they're --

14   they're -- you are paying Apple, Apple is maintaining a

15   record of the transactions, the -- the prices that you've

16   paid. Apple will send the total of those, when you've

17   exceeded the -- the threshold I discussed earlier, to the

18   credit card company to post the transaction.

19   Q.   Okay. And that record that Apple keeps of your various

20   purchases and that's used to later charge you, are you saying

21   that that's covered by the asserted -- or in that process, as

22   you make payments and Apple keeps a record --

23   MR. CURRY: Withdraw the question.

24   Q.   (By Mr. Curry) In that process, where you identify

25   downloads and you select them and Apple keeps a record of

 1   what they are and the prices and later charges you, is that

 2   your testimony that that process is still covered by the

 3   asserted claims?

 4   A.   That's not the process that I -- I'm identifying as

 5   what's the payment validation, not the sending it off later

 6   is not -- not that aspect, no.

 7   Q.   There's a payment validation aspect to these claims, as

 8   well, right?

 9   A.   Yes.

10   Q.   Okay. And with payment data and payment validation

11   taken together, is it your opinion that the system we just

12   gone -- had just gone over where I'm selecting multiple

13   content for download and then later get charged for all of

14   those items together, when Apple then sends off that -- its

15   record of all my various downloads, that that entire process

16   is still covered by the asserted claims?

17   A.   No. And that's not how I would describe Apple's process

18   either.

19   Q.   But in your response earlier when you described how

20   Apple -- Apple's process worked, you still believe that

21   that's covered by the asserted claims?

22   A.   The portions identified earlier, yes.

23   Q.   Dr. Jones, other than the terms that were construed by

24   this Court, did you apply the plain meaning of claim terms

25   for the remainder of these claim elements?

1   A.   Yes.

2   Q.   And you testified earlier that patents are written for a

3   person of ordinary skill in the art?

4   A.   Yes.

5   Q.   And you understand that patents have two general

6   sections.   There's the specification, where there's a

7   description of the embodiments, and then there are claims

8   that govern the scope of invention?

9   A.   Yes.

10 Q.   And you understand that the claim -- claim terms are

11 construed by the Court, right?

12 A.   Yes.

13 Q.   And that construing a claim term is a legal

14 determination?

15 A.   Yes.

16 Q.   And you're not here to make that kind of legal

17 determination; is that right?

18 A.   That's correct.

19 Q.   And a person of ordinary skill in the art can't make a

20 legal determination, right?

21 A.   Not that has any binding, no.

22 Q.   And, in fact, if a person of ordinary skill in the art,

23 if they're wrong about what a particular claim term means

24 and -- and it's later construed to be something different,

25 then the claim scope has changed, correct?

1   Let me rephrase that question for you, Dr. Jones.

2   MS. FUKUDA: I withdraw that.

3   Q.   (By Ms. Fukuda) You agree that how a claim term is

4   construed by the Court will have an impact on the scope of

5   that claim?

6   MR. CURRY: Objection, Your Honor.   May we

7   approach?

8   THE COURT: Approach the bench.

9   (Bench conference.)

10   MR. CURRY: Your Honor --

11   THE COURT: Just a minute.

12   MR. CURRY: Yes.

13   THE COURT: Speak into the microphone.   Tell me

14   what the objection is, Mr. Curry.

15   MR. CURRY: Your Honor, this is Austin Curry.   This

16   line of questioning is calling into question the propriety of

17   the Court's claim constructions by suggesting that the

18   Court -- that something other than giving these terms their

19   plain and ordinary meaning, as -- in light of the

20   specification, as required by the law.   It's just improper.

21   MS. FUKUDA: Your Honor, my only point is that

22   once the Court construes the claim term, it's governed -- the

23   scope of the claim is governed by that construction and not

24   by what someone would understand it to be beforehand.

25   MR. CURRY: That is exactly the problem.   The

 1   Court's construed patents as one of skill in the art would

 2   understand them and for the implication to be that Your Honor

 3   gave some other construction and scope of these claims that

 4   would be understood by persons of skill in the art, is highly

 5   prejudicial and -- and it's an affront to the judicial

 6   process, Your Honor.

 7   MS. FUKUDA: Your Honor, we had different experts

 8   opine on what a person of ordinary skill in the art would

 9   understand these terms before the Markman process, and

10   obviously different people of ordinary skill in the art will

11   differ on that. And we're merely pointing out that that's a

12   legal determination.

13   THE COURT: Well, there's clearly an order in

14   limine on going behind the claim construction process. We

15   had that discussion yesterday, and I made it very clear this

16   morning we were not going to go behind the claim construction

17   process.

18   I'm going to sustain the objection, and I'm going

19   to instruct the jury that the terms construed by the Court

20   that are in their notebooks are to be applied by them

21   throughout this trial; and that any terms for which the Court

22   has not supplied them a construction are to be understood

23   based on the plain and ordinary meaning.

24   MR. CALDWELL: Your Honor, will you also -- will

25   you also state into the record that that question is stricken

 1   from the record? I'm worried about the implication that it

 2   may look like Dr. Jones is in trouble, and the truth is,

 3   honestly, we won every single --

 4   THE COURT: You're going to have to speak up.

 5   MR. CALDWELL: We won every single claim

 6   construction. I'm worried about the implication that it

 7   looks like -- based on her question that's pending, it looks

 8   like he's doing something nefarious, and so may we also

 9   request that the question be stricken from the record?

10   MS. FUKUDA: And, Your Honor, let me just correct

11   that. It's not true that they have won every claim

12   construction. In fact --

13   THE COURT: Well, you know, that's -- that's for

14   you all to -- to spin however you want to spin it. I don't

15   care who thinks they won their claim construction or didn't.

16   What I care about are the constructions that have

17   been adopted and the application of the plain and ordinary

18   meaning to all other terms.

19   MR. CALDWELL: Yes, sir.

20   THE COURT: We're not going to keep having this

21   fight, folks.

22   MR. CALDWELL: That's true, we agree completely --

23   THE COURT: I'll -- I'll strike the last question

24   and answer.

25   MR. CALDWELL: Thank you, Your Honor.

1   MR. CURRY: Thank you, Your Honor.

2   (Bench conference concluded.)

3   THE COURT: Ladies and Gentlemen of the Jury: I am

4   striking the last question and answer.   You are to disregard

5   both the question and the answer.

6   Also, I'm going to instruct you that within your

7   juror notebooks is a list of terms that the Court has

8   construed.   As to those terms, you must apply those

9   constructions or definitions to those terms in answering the

10   verdict that will be submitted to you after the evidence is

11   complete in this trial.

12   For any terms where the Court has not supplied you

13   a precise, written construction, you are to apply the plain

14   and ordinary meaning of those terms.

15   All right.   With that instruction, let's move

16   forward.

17   For the record, the objection is sustained.

18   Let's move forward.

19   MS. FUKUDA: Thank you, Your Honor.

20   Q.   (By Ms. Fukuda)   Dr. Jones, use rule is one of those

21   claim terms for which you had applied plain and ordinary

22   meaning?

23   A.   Yes.

24   Q.   And you agree that Mr. Racz did not invent use rules,

25   right?

 1   A.   That's correct.

 2   Q.   And use rules are rules that restrict the use of content

 3   in a general sense. Would you agree with that?

 4   A.   Perhaps at a high level, but I would focus on the

 5   language of the claims for what the use rules are to do.

 6   Q.   Now, you would agree that use rules existed before Mr.

 7   Racz ever thought of his invention, right?

 8   A.   Certainly the general concept, yes.

 9   Q.   Okay. And, in fact, use rules were being used for

10   various different types of content before Mr. Racz's

11   invention?

12   A.   Yes.

13   Q.   And, in fact, use rules were being used even before

14   content was being widely circulated on the Internet; isn't

15   that right?

16   A.   I believe so, but I'm not recollecting something

17   specific right now.

18   Q.   So focusing on the term use rules, that appears in

19   Claims 26 and 32 of the '772 patent?

20   A.   Yes.

21   Q.   And, Dr. Jones, what you've identified as the use rules

22   here, and what I'd like to do is to turn to your flip charts

23   that you have generated. If you don't mind, could I do that?

24   A.   Yes.

25   MS. FUKUDA: And, Your Honor, could I flip over to

1 a certain chart for the jury?

2   THE COURT: Certainly, counsel.

3 Q.   (By Ms. Fukuda) Now, Dr. Jones, in the context of movie

4 rentals, isn't it true that what you've identified as the use

5 rules -- right here on that left column of your chart -- I'm

6 sorry, I can't turn it back and forth for you. Do you recall

7 that?

8 A.   Yeah, I know that.

9   THE COURT: Counsel, you're welcome to use the

10 handheld microphone if it helps you.

11   MS. FUKUDA: Okay.

12   THE COURT: I'll have the CSO bring it to you.

13   MS. FUKUDA: Thank you. Thank you, Your Honor.

14 Q.   (By Ms. Fukuda) So to repeat that question, the use

15 rules that you identified in the context of a movie rental

16 here is you pointed to 30-day and 24-hour. Do you see that?

17 A.   Yes.

18 Q.   And those particular use rules that you had identified

19 are embodied in the rental keybag that's sent, that's your

20 testimony?

21 A.   Yes.

22 Q.   Now, isn't it true that those -- the 30 days and the 24

23 hours are represented by numbers in the rental keybag that's

24 sent from Apple to the user device when a user rents a movie?

25 A.   Yes.

1 Q. And, in fact, those numbers are embodied in a couple of

2 fields that you had identified -- I think at one point -- are

3 you familiar with rental duration and playback duration?

4 A. Yes.

5 Q. So you would agree that the numbers embodied in those

6 fields are use rules that you identified?

7 A. Yes.

8 Q. Dr. Jones, wouldn't you agree that the only information

9 that's within the rental duration and playback duration

10 fields is a number?

11 A. Yes.

12 Q. And, in fact, it's an integer as identified in the

13 source code, isn't it?

14 A. My recollection may be an unsigned integer. I'd have to

15 look back.

16

17 Q. If you could -- you have a series of binders next to

18 you, and there is a binder that has a number of DXs and PXs

19 in them. If you could isolate that.

20 A. This one that's entitled cross-examination exhibits?

21 Q. Yes.

22 A. Okay.

23 Q. And do you see some tabs with DX and PX numbers in them?

24 A. I do.

25 Q. Would you turn to the tab that's labeled DX-APL 302?

 1   They should be in alphanumeric order in your binder.

 2   A.   I'm there.

 3   MS. FUKUDA: Your Honor, for the purposes of not

 4   going through the process of sealing the courtroom, Apple has

 5   redacted portions of this document and only show two lines of

 6   code that would be okay to show in open court.   Could I show

 7   that to the witness?

 8   THE COURT: Is there objection?

 9   MR. CURRY: No objection.

10   THE COURT: Proceed.

11   Q.   (By Ms. Fukuda) If you could turn to that binder or that

12   particular exhibit, DX-APL 297.

13   MS. FUKUDA: Could we pull that up on the slide as

14   well, Mr. Lee?

15   Thank you.

16   Q.   (By Ms. Fukuda) Do you recognize those two fields we

17   were just discussing, the rental duration and the playback

18   duration?

19   A.   I do.

20   Q.   And you've examined Apple's source code for this case,

21   haven't you?

22   A.   Yes.

23   Q.   And you spent a long time doing that.

24   A.   Yes.

25   Q.   Do you remember seeing this portion of the code?

1 A.   Yes.

2 Q.   And isn't it true that in this exhibit here that's

3 shown, the Lines 300 and 301 of the code identifies rental

4 duration and playback duration as integers?

5 A.   Well, as unsigned integers.

6 Q.   Unsigned integers. And that's a number, right?

7 A.   Yes.

8 Q.   Now, for the other two asserted claims, Claim 13 of the

9 '720 patent and Claim 32 of the '221 patent, they use the

10 term access rule, right?

11 A.   Yes.

12 Q.   And that's another term for which you use plain meaning?

13 A.   Yes.

14 Q.   And Mr. Racz did not invent access rules?

15 A.   No.

16 Q.   The -- again, for those access rules, you had also

17 identified these two fields we had talked about, rental

18 duration and playback duration, as the rules; is that

19 correct?

20 A.   Yes.

21 Q.   And, again, those represent numbers.

22 A.   Yes, the unsigned integers we saw earlier.

23 Q.   Okay. Dr. Jones, you've also spent some time on the

24 parental controls in Apple's system.

25 A.   Yes.

 1   Q.   And, now, you agree that the asserted claims -- I'm

 2   sorry.

 3   Focusing on the asserted claims of the '772 patent, you

 4   agree that they require selecting content that's already

 5   stored on your user device, right?

 6   A.   Yes.

 7   Q.   And you agree that the claim requires code to evaluate

 8   use status data and use rules to determine whether access is

 9   permitted to that selected content?

10   A.   Yes.

11   Q.   Isn't it true that the claims require that you first

12   select the content, and then a determination is made

13   regarding whether access is permitted to that selected

14   content?

15   A.   Yes.

16   Q.   And you agree that if a piece of content is hidden from

17   your view on your display, then you can't select it in the

18   first place.

19   A.   Not necessarily. I don't agree.

20   Q.   When you have turned on parental -- parental

21   restrictions on your phone, and let's say anything that's

22   over, you know, a 14-year-old rating is blocked from your

23   phone, when you go to look at your phone, isn't it true --

24   and you want to access your content -- let's say you've

25   downloaded movies, and let's say one of those videos that

1 you've downloaded is an episode from True Blood, and it can't

2 be viewed; it's got a rating that blocks any -- if you -- if

3 you set your rating to say, you know, anybody over 14 can't

4 watch it, then that episode is going to be blocked from your

5 view of your content.

6 A.   Yes, you can do that.

7 Q.   Okay. So when you go to your phone with that parental

8 restriction turned on, you're not going to see that episode

9 of True Blood on your phone, right?

10 A.   That's correct.

11 Q.   And if it's not there, you won't be able to select it as

12 a user, can you?

13 A.   I wouldn't agree with that.

14 Q.   You would not.

15   So your testimony is that the user can still select

16 something that they can't see on their phone?

17 A.   In certain circumstances, yes.

18 Q.   In the circumstance where a user accesses their content

19 and restriction is turned on and it's blocked from view, can

20 that user, at that moment, push the content or -- or select a

21 particular piece of content?

22 A.   They can. They can select one or more items of content.

23 Q.   They can select the content that hasn't been blocked

24 from their view, right?

25 A.   They can select, for example, all movies or all TV

1 shows.

2 Q.   And when they select the all movies or all TV shows on

3 their phone and restrictions are turned on, they're only

4 going to see a subset of those movies, right?

5 A.   That's all they'll be permitted to see after the use

6 rules are evaluated, that's correct.

7 Q.   At that point, if they want to select something that's

8 already been blocked out, they can't even see it, so they

9 can't select it.

10 A.   Right. But that additional selection isn't required.

11 Q.   Dr. Jones, you also testified regarding Apple and its

12 content delivery networks.

13   Do you remember that?

14 A.   Yes.

15 Q.   Okay. And this is with respect to Claim 13 of the '720

16 patent and Claim -- Claim 32 of the '221 patent, right?

17 A.   I testified with that respect -- with respect to

18 everything.

19 Q.   And you recall that in those two claims, there's a

20 requirement that the data supplier supplies content to the

21 user and that that data supplier supplies all of the other

22 things associated with that content to the user, regarding

23 the use of that item.

24   Well, let me make this a little bit easier.

25   MS. FUKUDA: Why don't we pull up Claim 13 of the

 1   '720 patent, and that's PX 1.

 2   Q.   (By Ms. Fukuda) And, Dr. Jones, do you see that claim in

 3   front of you here?

 4   A.   I do.

 5   Q.   So you would agree that on this particular content --

 6   give me one second here.

 7   You see there's a reference to the data supplier?

 8   A.   I do.

 9   Q.   Okay.   And in the -- in the preamble there, it says a

10   data access terminal for retrieving data from a data

11   supplier.

12   A.   Yes, I do.

13   Q.   That's the preamble for Claim 3 that 13 depends on.

14   A.   Yes.

15   Q.   And that data is referring to content, correct?

16   A.   Yes.

17   Q.   And that's being retrieved from a data supplier.

18   A.   Yes.

19   Q.   If we go further down into that claim, let's look at the

20   second mention.   If you go further down, you'll see code --

21   the first code element.   It says: Code to read payment

22   data -- oh, I'm sorry.   That's -- that's the wrong one here.

23   Let's go further down.

24   Here we go.   One, two, three -- third code element:

25   Code responsive to the payment validation data to retrieve

```
 1    data from the data supplier.

 2         Again, there you see that the data or the content is

 3    being retrieved from the data supplier, right?

 4    A.   Yes.

 5    Q.   Okay.  And then let's look at the next code element:

 6    Code responsive to the payment validation data to receive at

 7    least one access rule from the data supplier.

 8         Do you see that?

 9    A.   Yes.

10    Q.   And that claim requires that you as the user receive the

11    access rule and the data from the data supplier, right?

12    A.   Yes.

13    Q.   And you testified earlier that in a claim, when you use

14    the word "said" something, you're referring back to the same

15    element you mentioned earlier.

16         Do you remember that testimony?

17    A.   I do.

18    Q.   And isn't it true that in claim drafting, if you see the

19    word "the" later on in a claim, it's also referring back to

20    the same thing that it -- that was mentioned earlier, if it's

21    referencing the -- the same term?

22    A.   Yes.

23    Q.   Okay.  So the data supplier in those two different

24    places in this claim refers to the same data supplier,

25    doesn't it?
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1   A.   Yes.

2   Q.   Now, you agree that Apple and Akamai are different

3   companies?

4   A.   Yes.

5   Q.   Okay. And Akamai supplies -- is one of the content

6   delivery networks for Apple?

7   A.   Yes.

8   Q.   And you agree that in the example of a movie that's

9   purchased or rented through the iTunes Stores, that the

10   iTunes Store server at Apple supplies to the -- supplies

11   the --

12   All right. Let me -- let me rephrase that one.

13   When you rent or purchase a movie from the iTunes Store,

14   you're going to get your content from Akamai, correct?

15   A.   Yes.

16   Q.   And you're also going to get all those things that you

17   had accused as access rules from the Apple server, correct?

18   A.   Yes.

19   Q.   And Apple isn't Akamai, right?

20   A.   That's correct.

21   THE COURT: Let me interrupt here. This looks like

22   as good a place as any for us to break for lunch. We'll

23   continue with the cross-examination after lunch.

24   Ladies and Gentlemen of the Jury: Please bring --

25   take your notebooks with you to the jury room over the lunch

1 break.   I anticipate we'll be out for lunch approximately 45

2 minutes.   As I mentioned yesterday, lunch is provided for

3 you.

4   Don't discuss the case among yourselves, and follow

5 all of my other instructions.   But with those reminders, you

6 are excused for lunch at this time.

7   COURT SECURITY OFFICER: All rise for the jury.

8   (Jury out.)

9   THE COURT: All right.   Counsel, we stand in recess

10 for lunch.

11   (Lunch recess.)

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 1                          CERTIFICATION

 2

 3               I HEREBY CERTIFY that the foregoing is a true

 4    and correct transcript from the stenographic notes of the

 5    proceedings in the above-entitled matter to the best of our

 6    abilities.

 7

 8

 9    /s/_____
      SHEA SLOAN, CSR, RPR                    February 17, 2015
10    Official Court Reporter
      State of Texas No.:  3081
11    Expiration Date:  12/31/16

12

13

14

15

16    /s/_____
      SHELLY HOLMES, CSR, TCRR
17    Deputy Official Court Reporter
      State of Texas No.:  7804
18    Expiration Date  12/31/16

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